

Remarks

Claims 1-13 remain in the application. Claim 10 has been amended.

Claim 10 has been reworded using the language suggested by the Office.

The §112 Rejection

Claims 1-13 were rejected under 35 U.S.C. §112 as being indefinite. In particular, Claim 1 was found to have an insufficient antecedent basis for “determining one or more of the values x, y, and z.”

It is respectfully submitted that this limitation is clear. The Patent Statute does not require that claim elements must necessarily have antecedent basis *per se*. Rather, 35 U.S.C. § 112, second paragraph requires claims “particularly pointing out and distinctly claiming the subject matter” of the invention. The lack of antecedent basis is only a clue, an indicator to be on the alert to consider the possibility that a word or phrase might be unclear, depending on context. On the other hand, the word or phrase may be perfectly clear, when properly read in context. The absence of antecedent basis merely alerts an Examiner to review whether there might be a question of clarity, in context. See M.P.E.P. § 2173.05(e), first paragraph (citation omitted):

Obviously, however, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite. . . .”

In addition, M.P.E.P. § 2173.05(e), citing *In re Larsen*, No. 01-1092 (Fed. Cir. May 9, 2001), states:

The court reversed the examiner’s rejection and stated that the totality of all the limitations of the claim and their interaction with each other must be considered to ascertain the inventor’s contribution to the art. Upon review of the claim in its entirety, the court concluded that the claim at issue apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, paragraph 2.”

The language of Claim 1 regarding the determination of the values of x, y and z is clear when read in context of the entire claim. The ability to determine the values is fully described in the claim language, and a person of ordinary skill in the art could determine the claim scope.

This claim limitation is definite. When the claim is considered in its entirety, the determining of values of x, y, and z is fully explained by the paragraphs that follow this language. The scope of this claim is reasonably ascertainable to a person skilled in the art. It is respectfully submitted that this claim is definite, and this ground of rejection should be withdrawn.

Claim Objections

Claim 10 was objected to due to informalities. Claim 10 has been amended to reflect the language suggested by the Office. In light of this amendment, Applicants request this objection to be withdrawn.

Claims 11-13 were objected to under 37 C.F.R. §1.75(c) as being improper dependent claims, and do not pass the infringement test of MPEP 608.01(n). Applicants submit that this objection is either improper or is vague. If this rejection is meant to imply that Claims 11-13 are either multiple dependent claims or claims that do not contain all the elements of the claim from which they depend, then this objection is improper. Claims 11-13 are not “multiple dependent claims” as to fall under 37 C.F.R. §1.75(c). Claims 11 and 13 incorporate completely all the limitations of Claim 1 and thus would pass the infringement test of MPEP 608.01(n). Claim 12 is a dependent claim to Claim 11, and as such would incorporate all the limitations of Claim 1 and of Claim 11.

In addition, MPEP 2173.05(f) states that “[a] claim which makes reference to a preceding claim to define a limitation is an acceptable claim construction which should not necessarily be rejected as improper or confusing under 35 USC 112, second paragraph.”

If this objection relates to another issue, then Applicants respectfully request withdrawal of this objection and reissuance of a new office action that clarifies this rejection.

The §101 Rejection

Claims 1-13 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Office stated that the claims “do not transform underlying subject matter (such as an article or materials) to a different state or thing, nor are they tied to another statutory class (such as a particular machine).” The Office then cited the Interim Guidelines of November 2005.

However, a few days prior to the mailing of this office action, the Office released new Interim Guidelines (July 27, 2010) in light of the decision of the U.S. Supreme Court in *Bilski v. Kappos*, 561 U.S. ____ (2010). Under this decision and these guidelines, factors that weight in favor of patent-eligibility include: satisfying the criteria of the machine-or-transformation test and evidence that the abstract idea has been practically applied.


In the instant case, the Claim 1 does not recite an abstract idea. Claim 1 as written inherently requires a machine to “measure the visible reflectance spectrum or the visible absorbance spectrum”, and then transforms information from the full spectrum to values that can be used to reflect the oxygenation of tissues. The recitation of the machine does not have to be explicit as stated in the summary sheet of the factors attached to the July 27, 2010 memorandum. Applicants submit that a person of skill in the art would know the type of machine that would be used to obtain a “visible reflectance spectrum or a visible absorbance spectrum of the tissue in vivo over at least a portion of the range of wavelengths between 530 nm and 584 nm” as recited in amended Claim 1. The method in the Claim takes the reflectance or absorbance of the tissues and using the full spectrum from between 530 nm and 584 nm determines values that were shown to correspond to the oxygen saturation in the tissue.

Applicants respectfully submit that this rejection should be withdrawn.

Conclusion

Claims 1-13 remain in the application. In light of the amendment and the above remarks, Applicants request allowance of all claims at an early date.

Respectfully submitted,



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